

**Amendments to the Specifications:**

Please replace the paragraph beginning on page 12, line 14 and ending on page 13, line 9 with the following amended paragraph:

--A total of 60 Raman spectra were obtained for each concentration of citric acid (1-30%). The citric acid concentration range was 1-30% (w/w) in 25g of sucrose. The performance of the Raman immersion probe for measuring citric acid in a citric acid/sucrose mixture is illustrated in Figure 6B 7B. The calibration results from the PLS analysis were  $r^2 = 0.987$ , RMSC = 1.2% and correlation of 0.993. The distribution of data points for each citric acid concentration is representative of the mixing of the citric acid into the sucrose. The fluidization of the 2 layers of powder was correlated with the onset of data collection. The mixing information is described primarily in the first scores plot of the 6 factor model as shown in Figure 6G 7C. From the loadings data for this factor it was determined that the data are describing the dilution of the initial concentration of sucrose as the two powders are blended. This is most apparent in Figure 6G 7C for the first two citric acid concentrations (samples 1-60, 61-120) where the scores plots level off indicating nearly complete mixing of the sample. This leveling off of the data is not as apparent at the higher concentrations. It is believed that this is primarily an experimental effect due to limited gas flow through the bed to completely fluidize the higher masses of powder. Recent experiments have also shown that due to the limited volume of the fluidized bed that the higher mass samples should have been fluidized for longer periods of time to achieve complete mixing. Therefore the data shown for the higher masses of citric acid in

Figure ~~6G~~ 7C had not achieved complete mixing when the experiment was stopped. Because of the sample-to-sample reproducibility of the immersion probe of this invention, specific models and algorithms may be developed for describing and predicting the degree of mixing achieved in various mixers and blenders.--